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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,316

09/25/2006

Wallace E. Fleming

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6805

31209

7590

09/30/2008

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EXAMINER

DARNER, CHRISTOPHER J

ART UNIT

PAPER NUMBER

3633

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,316	<b>Applicant(s)</b> FLEMING, WALLACE E.	
	<b>Examiner</b> CHRISTOPHER J. DARNER	<b>Art Unit</b> 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/19/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Species I, claims 1-3, 6 and 7 in the reply filed on September 10, 2008 is acknowledged.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Two limitations contradict each other, the first being the bolt attaching the plates to the post frame and the second being the vacuum as the sole means of attaching the plates to the post frame. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benson et al. (U.S. Patent # 5,175,975) in view of Clements (U.S. Patent # 2,662,043) in view of Ito et al. (U.S. PGPUB 20040128947) and further in view of Wolfe (U.S. Patent # 6,085,469) .**

With respect to claim 1, Benson teaches said panel consisting of an outward facing weather exposed exterior steel plate (12) and an identical inward facing interior steel plate (14) which are juxtaposed to each other in Figure 1 and column 6, lines 47-52. Benson teaches an enclosure called a vacuum chamber (15) from which air is withdrawn to create a vacuum, said vacuum creating an implosive suction pressure on the inside surfaces of said post frame and plates at column 6, lines 31-36. Benson teaches a spacer, in the form of and referred to as a sphere (16), is placed to block the suction pressure of the vacuum on the plates at Figure 2 and column 6, lines 37-46.

Benson does not teach said post frame usually forming a quadrangular shape depending on the shape of the plane surface being covered, consisting of a post positioned along each of the 4 straight sections of said post frame. Clements teaches a said post frame (1-4) usually forming a quadrangular shape depending on the shape of the plane surface being covered, consisting of a post positioned along each of the 4 straight sections of said post frame in Figure 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Benson to

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include said post frame usually forming a quadrangular shape depending on the shape of the plane surface being covered, consisting of a post positioned along each of the 4 straight sections of said post frame as taught by Clements in order to provide a balanced anchor distance between the plates.

Benson in view of Clements does not teach a lattice framework consisting of a network of equally spaced cross members that that block the suction pressure of the vacuum on the post frame. Ito teaches a lattice framework (14) consisting of a network of equally spaced cross members that that block the suction pressure of the vacuum on the post frame in Figure 2 and page 6, [0092], lines 13-15. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Benson in view of Clements to include a lattice framework consisting of a network of equally spaced cross members that that block the suction pressure of the vacuum on the post frame as taught by Ito in order to protect the post from the vacuum pressure.

Benson in view of Clements in view of Ito does not teach a post frame and said plates being held in their respective relative positions to each other by a bolt that passes through the two plates and the post frame at an anchor point in any location away from the vacuum chamber along the perimeter of the panel. Wolfe teaches a post frame and said plates being held in their respective relative positions to each other by a bolt that passes through the two plates and the post frame at an anchor point in any location away from the vacuum chamber along the perimeter of the panel in Figure 1A. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Benson in view of Clements in view of Ito to include a post frame and

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said plates being held in their respective relative positions to each other by a bolt that passes through the two plates and the post frame at an anchor point in any location away from the vacuum chamber along the perimeter of the panel as taught by Wolfe in order to allow flexibility of expanding and contracting the plates with respect to the post.

With respect to claim 2, Benson teaches the separation of the interior and exterior plates is maintained against the suction pressure of the vacuum by placing a sphere (16) between the said plates in Figure 2.

**6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benson et al. (U.S. Patent # 5,175,975) in view of Clements (U.S. Patent # 2,662,043) in view of Ito et al. (U.S. PGPUB 20040128947) in view of Wolfe (U.S. Patent # 6,085,469) as applied to claim 1 and further in view of Lickliter et al. (U.S. Patent # 3,675,382).**

With respect to claim 6, Benson in view of Clements in view of Ito in view of Wolfe does not teach the post frame of panels above ground level are erected in a contiguous manner with each two adjoining panels being served by a single post. Lickliter teaches the post frame of panels above ground level are erected in a contiguous manner with each two adjoining panels (52) being served by a single post (12) in Figure 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Benson in view of Clements in view of Ito in view of Wolfe to include the post frame of panels above ground level are erected in a contiguous manner with each two adjoining panels being served by a single post as

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taught by Lickliter in order to allow flexibility of expanding and contracting the plates with respect to one rigid stable post.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Benson in view of Clement in view of Ito in view of Wolfe to include erecting panels sufficiently away from and unattached to the building frame except at a single location on the roof of the building in order to allow flexibility of expanding and contracting the plates with respect to one rigid stable post without interference from the building frame.

**7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benson et al. (U.S. Patent # 5,175,975) in view of Clements (U.S. Patent # 2,662,043) in view of Ito et al. (U.S. PGPUB 20040128947) in view of Wolfe (U.S. Patent # 6,085,469) as applied to claim 1 and further in view of Clements (U.S. Patent # 2,511,620).**

With respect to claim 7, Benson in view of Clement in view of Ito in view of Wolfe does not teach the plates of such panels are subjected to thermally induced expansions and contractions on daily and seasonal bases. Clements (U.S. Patent # 2,511,620) teaches the plates of such panels are subjected to thermally induced expansions and contractions on daily and seasonal bases at column 1, lines 43-46. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Benson in view of Clements in view of Ito in view of Wolfe to include the plates of such panels are subjected to thermally induced expansions and contractions on daily

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and seasonal bases as taught by Clements (U.S. Patent # 2,511,620) in order to account for an outdoor variable environment.

Benson in view of Clement in view of Ito in view Clements (U.S. Patent # 2,511,620) does not teach the panels are unattached to post frames by any means other than the suction pressure of the vacuum and at a single anchor point in each panel, are provided sufficient space to accommodate any such expansions or contractions. Wolfe teaches the panels are unattached to post frames by any means other than the suction pressure of the vacuum and at a single anchor point in each panel, are provided sufficient space to accommodate any such expansions or contractions in Figure 1A. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Benson in view of Clement in view of Ito in view Clements (U.S. Patent # 2,511,620) to include teach the panels are unattached to post frames by any means other than the suction pressure of the vacuum and at a single anchor point in each panel, are provided sufficient space to accommodate any such expansions or contractions as taught by Wolfe in order to adjust the panels to the changing outdoor environment.



***Allowable Subject Matter***

**4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

With regard to claim 3, the prior art of record does not teach wherein the spheres that maintain the separation of the plates are each contained in a sling that holds it in its proper location when the panel is not under vacuum and permits it to roll in response to thermally induced expansion or contraction that occurs in one plate of the panel but not in the other when the panel is under vacuum.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dyar (U.S. Patent # 4,423,579) teaches Thermal insulating System particularly adapted for building construction, McGrath et al. (U.S. Patent # 5,875,599) teaches Modular insulation panels and insulated structures, Van Buren (U.S. Patent # 2,104,500) teaches Insulated Building Structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER J. DARNER whose telephone number is (571)270-3658. The examiner can normally be reached on Monday thru Friday 7:30AM to 4:00PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Darner/  
Examiner, Art Unit 3633

/Brian E. Glessner/  
Supervisory Patent Examiner, Art Unit 3633